

REMARKS

Claims 1-12 are pending; claim 12 is withdrawn; claims 1-3, 6, 10 and 11 are rejected; and claims 4, 5 and 7-9 are objected to in this application. Claims 4 and 7 are amended hereby.

Responsive to the Examiners rejection of claims 1-3 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,395,484 (Odell et al.), Applicants respectfully traverse the rejection, and submit that claims 1-3 are in condition for allowance.

Odell, et al. disclose a twin wire web former for a paper machine (Figs. 1, 2 and 5) including a head box 110 having a slice 112 through which a pulp suspension is feed onto a substantially horizontal initial part 10A (column 5, lines 50-53). The twin wire-forming zone runs vertically upwards. Carrying wire 10 and covering wire 20 are guided by guide rolls 11 and 22A, forming a forming gap G between wires 10 and 20. A pulp suspension jet J is feed out of a discharge opening 111 of head box 110 into forming gap G (column 9, lines 25-31). The twin wire zone precedes a vertical run on which a suction flat box 85 is arranged. Water is sucked from web W through carrying wire 10 and removed through gaps in ribbed deck 86 of flat box 85. The vertical run of the twin wire zone is curved on a suction box 15a of a second forming roll 15A thereafter web W is detached from covering wire 20 and is guided on carrying wire 10 to a pick up point (column 10, lines 3-11).

In contrast, claim 1, recites in part:

a turning element proximate an upper portion of said vertical segment ... said turning element being substantially smooth;

(Emphasis added). Applicants submit that such an invention is neither taught, disclosed nor suggested by Odell et al. or any of the other cited references, alone or in combination, and includes distinct advantages thereover.

Odell et al. disclose a twin wire web former for a paper machine including a vertical run of a twin wire zone that is curved on a suction box of a forming roll. It is commonly known among those skilled in the art of papermaking technology that suction that occurs through a forming roll requires the suction roll to have an open surface so that a vacuum can be pulled through the suction roll. If the suction roll did not have holes therein the roll would not be able to draw air therethrough. If it was substantially smooth, there would not be an open surface, such as the of the forming roll of Odell et al. Odell et al. discusses a smooth faced forming roll 15 (column 9, line 8), but only in a horizontal former, such as Fig. 1. When Odell et al. discusses a vertical former embodiment (such as shown in Figs. 2 and 5) roll 15 becomes a forming roll 15A (column 10, lines 3-11). This is a clear description of a suction roll and not a smooth roll. In contrast to the cited prior art, Applicants invention utilizes a turning element of a vertical segment, which is substantially smooth. Therefore, Odell et al. and any of the other cited references, alone or in combination, fail to disclose, teach or suggest a turning element proximate an upper portion of a vertical segment, the turning element being substantially smooth, as recited in claim 1.

An advantage of Applicants' invention is that a smooth turning roll is less expensive to incorporate into a papermaking apparatus than a suction roll. Another advantage of Applicants' invention is that energy cost are considerably reduced over the prior art. A further advantage of Applicants' invention is that the dry content of the forming web is further increased utilizing Applicants' invention, since there is increased dewatering of the web on both sides prior to reaching the turning element. For the foregoing reasons, Applicants submit that claim 1 and claims 2 and 3 depending therefrom, are in condition for allowance, which is hereby respectfully requested.

Claims 6, 10 and 11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Odell et al. However, claims 6, 10 and 11 depend from claim 1, and claim 1 is in condition for allowance for the reasons given above. Accordingly, Applicants submit that claims 6, 10 and 11 are in condition for allowance, which is hereby respectfully requested.

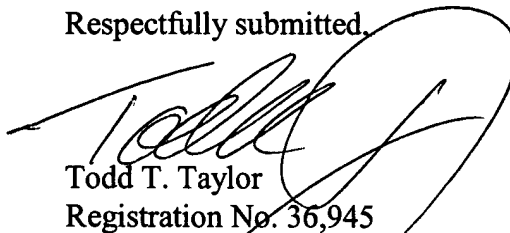
The Examiner has indicated that claims 4, 5 and 7-9 would be allowable if rewritten in independent form, for which Applicants thank the Examiner. Applicants have amended claims 4 and 7 placing them in independent form, and the dependency of claim 5 upon claim 4, and claims 8 and 9 on claim 7, now place claims 4, 5 and 7-9 in condition for allowance, which is hereby respectfully requested.

For the foregoing reasons, Applicants submit that no combination of the cited references teaches, discloses or suggests the subject matter of the amended claims. The pending claims are therefore in condition for allowance, and Applicants respectfully request withdrawal of all rejections and allowance of the claims.

In the event Applicants have overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby conditionally petition therefor and authorize that any charges be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

Should any question concerning any of the foregoing arise, the Examiner is invited to telephone the undersigned at (260) 897-3400.

Respectfully submitted,



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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on: October 26, 2004.

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